## **AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows.

- 1. (Previously Presented) An LSI testing apparatus for testing an electronic device comprising:
  - a power source for supplying a source voltage of direct current to said electronic device;
  - a detecting unit for detecting a source current with which said electronic device is supplied by said power source unit;
  - a judging unit for judging quality of said electronic device; and
  - means for overlaying an overlaid signal with a predetermined period on said source voltage supplied to the electronic device, wherein said judging unit judges said quality of said electronic device on the basis of said source current detected by said detecting unit in case said electronic device is supplied with said source voltage on which said overlaid signal is overlaid.
- 2. (Currently Amended) The LSI testing apparatus as claimed in claim 1, wherein said power source unit comprises means for changing a signal level of said overlaid signal, and said judging unit judges said quality of said electronic device for each signal level of said overlaid signal.
- 3. (Currently Amended) The LSI testing apparatus as claimed in claim 1, wherein said power source unit-comprises means for changing a frequency of said overlaid signal.

- 4. (Previously Presented) The LSI testing apparatus as claimed in claim 1, wherein said judging unit judges said quality of said electronic device on the basis of a difference between a source current, which should be supplied to said electronic device, in case said electronic device is supplied with said source voltage and a source current detected by said detecting unit in case said electronic device is supplied with said source voltage on which said overlaid signal is overlaid and a period of said overlaid signal.
- 5. (Previously Presented) The LSI testing apparatus as claimed in claim 1, wherein said judging unit judges said quality of said electronic device on the basis of a difference between a spectrum of a source current, which should be supplied to said electronic device, in case said electronic device is supplied with said source voltage on which said overlaid signal is overlaid and a spectrum of a source current detected by said detecting unit in case said electronic device is supplied with said source voltage on which said overlaid signal is overlaid.
- 6. (Previously Presented) The LSI testing apparatus as claimed in claim 1, wherein said judging unit judges said quality of said electronic device on the basis of a magnitude of a predetermined frequency component of said source current detected by said detecting unit in case said electronic device is supplied with said source voltage on which said overlaid signal is overlaid.
- 7. (Previously Presented) The LSI testing apparatus as claimed in claim 1 further comprising a pattern generating unit for providing a test pattern to said electronic device, wherein said judging unit judges said quality of said electronic device on the basis of said

source current detected by said detecting unit under a condition, where said test pattern is provided to said electronic device.

8. (Previously Presented) The LSI testing apparatus as claimed in claim 7, wherein said electronic device comprises a plurality of semiconductor devices, and said pattern generating unit provides said electronic device with said test pattern by which all of said plurality of semiconductor devices operate at least once.

9-21. (Cancelled)